



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

Soprema, Inc.
310 Quadral Drive
Wadsworth, OH 44281

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Soprema Modified Bitumen Roofing Systems over Wood Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 10-0408.07 and consists of pages 1 through 28.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 11-0119.07
Expiration Date: 12/31/14
Approval Date: 06/27/13
Page 1 of 28

ROOFING SYSTEM APPROVAL

<u>Category:</u>	Roofing
<u>Sub-Category:</u>	Modified Bitumen
<u>Material:</u>	SBS
<u>Deck Type:</u>	Wood
<u>Maximum Design Pressure</u>	-90 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopra G	39" x 108' (3.5 sq.)	ASTM D4601	Fiberglass reinforced oxidized asphalt base sheet for bonding or mechanically attaching to substrate. For use as a base/ply sheet only.
Modified Sopra G	39" x 108' (3.5 sq.)	ASTM D4601	Fiberglass reinforced modified asphalt base sheet for bonding or mechanically attaching to substrate. For use as a base/ply sheet only.
Soprabase	39" x 99' (3 sq.)	ASTM D4601	Oxidized asphalt, polyester reinforced, sand-surfaced base sheet. For use as a base/ply sheet only.
Soprabase S	39" x 65' (2 sq.)	ASTM D4601	SBS modified bitumen, polyester reinforced, sand-surfaced base sheet. For use as a base/ply sheet only.
Soprabase TG	39" x 65' (2 sq.)	ASTM D4601	SBS modified bitumen, polyester reinforced, film-surfaced base sheet. For use as a base/ply sheet only.
Sopra IV	36" x 180' (5 sq.)	ASTM D2178 Type IV	Type IV fiberglass reinforced, smooth surfaced plysheet used in multi-ply systems and complies with ASTM and UL Standards. Applied in hot asphalt or cold adhesive.
Sopra VI	36" x 180' (5 sq.)	ASTM D2178 Type VI	Type VI fiberglass reinforced, smooth surfaced plysheet. Sopra IV or VI are used in multi-ply systems and complies with ASTM and UL Standards. Applied in hot asphalt or cold adhesive.
Colvent TG	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced, modified bitumen membrane with 1" wide factory applied heat weldable strips on back side.
Colvent 180 TG	39" x 33' (1 sq.)	ASTM D6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied heat weld strips on back side.
Elastophene Sanded	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastophene Sanded 3.0	39" x 33' (1sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripped.
Elastophene HS Sanded	39" x 66' (2 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants and sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene PS	39" x 49' (1.5 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film for heat weld bonding to the top side. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene PS 3.0	39" x 49' (1.5 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film for heat weld bonding to the top side. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene SP	39" x 49' (1.5 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied b heat welding or ribbon stripping (after removal of plastic burn-off film).
Elastophene SP 3.0	39" x 49' (1 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied b heat welding or ribbon stripping (after removal of plastic burn-off film).
Elastophene Flam	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Elastophene Flam 2.2	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Elastophene Flam HS	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass/polyester composite reinforced modified bitumen membrane with fire retardants and plastic burn-off film on both sides. Applied by heat welding.
Elastophene 180 Sanded	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene 180 PS	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastophene GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene LS FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene FR+ GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene HS FR GR	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass/polyester composite reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene Flam GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam LS FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam FR+ GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam HS FR GR	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass composite reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopralene 180 Sanded	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 250 Sanded	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 180 Sanded 2.2	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt or cold adhesive.
Sopralene 180 PS	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the top and sanded on the bottom.
Sopralene 180 PS 2.2	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 180 SP 3.5	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 SP	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top
Sopralene 250 SP	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top
Soprafix [X]	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix Base 614	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 4-inch or 5-inch wide side lap with a plastic burn-off film on the bottom and sanded on the top. Applied by mechanical attachment. Lap heat welded or sealed with an approved cold adhesive.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Soprafix Base 622	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 4-inch or 5-inch wide side lap with a plastic burn-off film on the bottom and sanded on the top. Applied by mechanical attachment. Lap heat welded or sealed with an approved cold adhesive.
Soprafix-e	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Soprafix Base 641	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Sopralene Flam 180	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopralene Flam 180 GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralast 50 TV Alu	various	ASTM D6298	Fiberglass reinforced modified bitumen sheeting faced with aluminum foil. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Soprastar Flam	39" x 33' (1 sq.)	ASTM D6162	Polyester reinforced SBS modified bitumen membrane with a plastic burn-off film on the bottom side and a reflective white top surface. Applied by heat welding.
UNILAY	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants and surfaced with mineral granules. Applied by mechanical attachment, heat welding or ribbon stripping (after removal of plastic burn-off film).
Elastocol 500	various	ASTM D41	Asphalt primer.
Elastocol Stick	various	ASTM D41	Asphalt primer.
ALSAN Flashing™	1.25 gallon pail or 3.75 gallon pail	Proprietary	One part polyurethane/bitumen resin, moisture cure compound.

ALSAN Polyfleece	4", 8" or 39" wide by 50' long	Proprietary	Non-woven polyester reinforcement used in the ALSAN Flashing system.
SBS Elastic Cement	5 gallon pail	Proprietary	Elastomeric bitumen based mastic compound.
Soprawalk	39" x 26' (3/4 sq.)	Proprietary	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and mineral granules on the top. Applied by hot asphalt, cold adhesive or ribbon stripping.
High Velocity [®] Insulation Adhesive II (HVIA-II)	3 gal pail	Proprietary	One part elastomeric urethane foam adhesive.
High Velocity [®] Insulation Adhesive III (HVIA-III)	4 dual cartridges per carton	Proprietary	Two part elastomeric urethane foam adhesive.
High Velocity [®] Insulation Adhesive III – Green	4 dual cartridges per carton	Proprietary	Two part elastomeric urethane foam adhesive.
High Velocity Insulation Adhesive PG	5 gal or 50 gal	Proprietary	Two part elastomeric urethane foam adhesive.
FM Adhesive	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Plastomeric bitumen based cold adhesive.
FM Adhesive (VOC)	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Elastomeric bitumen based cold adhesive.
COLPLY Modified Adhesive	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Elastomeric bitumen based cold adhesive.
Soprastar Adhesive	5 gallon pail or 55 gallon drum	Proprietary	SBS modified bitumen based cold adhesive.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam-II, ACFoam-III	Polyisocyanurate foam insulation	Atlas Roofing Corporation
EPS	Type IX 1.8 pcf. Polystyrene Insulation	Generic
XPS	Type IV 1.6 pcf. Polystyrene Insulation	Generic
High Density Wood Fiberboard	Wood fiber insulation board	Generic
Perlite Insulation	Perlite insulation board	Generic
DensDeck, DensDeck Prime, DensDeck DuraGuard Fireguard Type X Gypsum Board	Water resistant gypsum board	Georgia Pacific Gypsum LLC
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, LLC
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
Fesco Board	Expanded mineral fiber insulation	Johns Manville Corp.
Multi-Max FA-3	Polyisocyanurate foam insulation	RMax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum board	USG Corp.
M-Shield	Polyisocyanurate foam insulation	Soprema, Inc.
Sopra-ISO r, Sopra-ISO+ r	Polyisocyanurate foam insulation	Soprema, Inc.
Sopra-ISO s, Sopra-ISO+ s	Polyisocyanurate foam insulation	Soprema, Inc.
Structodek High Density Fiberboard Roof Insulation	High Density wood fiber insulation board	Blue Ridge Fiberboard
Sopraboard	Mineral fortified asphaltic cored coverboard between two layers of asphalt saturated fiberglass mat.	Soprema, Inc.



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Soprema #12, #14 & #15 Fasteners	Fasteners for membrane or insulation attachment to wood, steel or concrete decks.		Soprema, Inc.
2.	Dekfast#12, #14 & #15 HS Fasteners	Insulation fastener		SFS Intec, Inc.
3.	Dekfast Galvalume Steel Hex Plate	Galvalume AZ50 steel plate	2 7/8" x 3 1/4"	SFS Intec, Inc.
4.	Dekfast DekFlat Round Plastic Lock Plate	Polypropylene locking plate.	3" x 3 1/4"	SFS Intec, Inc.
5.	OMG AccuTrac Plate	Galvalume square stress plate	3" square	OMG, Inc.
6.	OMG 3" Galvalume Steel Plate	Galvalume stress plate.	3" round	OMG, Inc.
7.	OMG Flat Bottom Metal Plate	Galvalume stress plate.	3" square	OMG, Inc.
8.	OMG Fastener #12, #14 & #15	Insulation fastener.		OMG, Inc.
9.	OMG 3 in. Round Metal Plates	Galvalume AZ50 steel plate	3" round	OMG, Inc.
10.	OMG Plastic Plate	Polypropylene stress plate	3.25" round	OMG, Inc.
11.	Dekfast System ES-I Fastening Systems	Insulation fastening assembly with plate.	3" round	SFS Intec, Inc.
12.	Trufast #14 HD Fastener	Insulation fastener for wood, steel and concrete.		Altenloh, Brinck & Co. U.S., Inc.
13.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete.		Altenloh, Brinck & Co. U.S., Inc.
14.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 steel plate	3" round	Altenloh, Brinck & Co. U.S., Inc.
15.	Dekfast Isofast IF/IG-C-82x40	Galvalume AZ50 steel plate	82 x 40 mm	SFS Intec, Inc.
16.	Dekfast Isofast IFC/IW-70x70	Galvalume AZ50 steel plate	70 x 70 mm	SFS Intec, Inc.
17.	Galvalume Steel 3" Round Insulation Plate	Galvalume AZ50 steel plate	3" round	SFS Intec, Inc.
18.	Soprema 3" Round Insulation Plate	Stress plate	3" diameter	Soprema, Inc.
19.	Soprafix 2" SB Stress Plate	Stress plate	2" diameter	Soprema, Inc.
20.	Soprafix 2-3/8" SB Stress Plate	Stress plate	2-3/8" diameter	Soprema, Inc.



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
21.	Soprafix MBB-R	Metal Batten Bar		Soprema, Inc.
22.	Soprema 2" Seam Plate	Stress plate	2" diameter	Soprema, Inc.
23.	Soprema 3" Metal Insulation Plate	Stress plate	3" diameter	Soprema, Inc.
24.	Soprema #14 MP, #15 HD Fastener	Insulation and membrane fasteners		Soprema, Inc.

APPROVED SURFACING/COATING OPTIONS:

TABLE 4

Chosen components must be applied according to manufacturer's application instructions. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

System Number	Manufacturer	Application
1.	Generic	Gravel applied at 400 lbs./sq., adhered with flood coat of asphalt at 60 lbs./sq.
2.	Generic	Slag applied at 300 lbs./sq., adhered with flood coat of asphalt at 60 lbs./sq.
3.	Soprema, Inc.	Gravel applied at 400 lbs./sq., adhered with FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or SopraStar Adhesive at 4 gal./sq.
4.	Karnak Corporation	Karnak #97 Fibrated Aluminum Roof Coating applied at an application rate of 1.5 gal./sq.
5.	Soprema, Inc.	Cural Aluminizer applied at an application rate of 2 gal./sq.
6.	Thermo Manufacturing Systems, LLC	Super Prep Roof Coating applied in two coats at an application rate of 1.5 gal./sq./coat.
7.	United Coatings Manufacturing Company	Roof Mate Coating, applied in one base coat at a rate of 1.5 gal./sq., and one finish coat at a rate of 1.5 gal./sq.
8.	Insulating Coatings Corporation	Astec 2000 Finish Coat applied in two base coats at a rate of 0.75 gal./sq./coat and two finish coats at a rate of 0.75 gal./sq./coat.
9.	Henry Company	HE280DC White Elastomeric Roof Coating applied in two coats at an application rate of 1 gal./sq./coat.
10.	National Coating Corp.	Acryshield® A500 applied in two coats at an application rate of 1 gal./sq./coat.
11.	Soprema, Inc.	R-Nova Roof Coating.
12.	Generic	Semi-ceramic coated colored granules.



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Name</u>	<u>Date</u>	
Dynatech Engineering Corp.	10.94.27	TAS-114	10/27/94	
	2491-04.95	TAS-114	01/04/95	
Exterior Research & Design, LLC.	2003.02.97-1	TAS-114	02/15/97	
	2003-2.04.97-1	TAS-114	04/15/97	
	2002.07.97-1	TAS-114	08/15/97	
	2757.02.05	Physical Properties	02/03/05	
	2778.07.05	TAS-114	07/15/05	
Trinity ERD	2779.11.05-R1	TAS-114	04/18/07	
	S6740.11.07	ASTM D6163	11/02/07	
	S11440.06.10	ASTM D4798	06/01/10	
		TAS 110		
	S11440.01.11-R1	ASTM D6164	06/07/12	
	S11440.11.10-4	ASTM D2178	11/17/10	
	S11440.11.10-3-R1	ASTM D4601	01/30/13	
	S11440.12.10-1-R1	ASTM D6163	06/07/12	
	S32700.12.10	ASTM D6162	12/15/10	
	S35860.12.11-1	ASTM D2178	12/12/11	
	S35860.12.11-2	ASTM D4601	12/12/11	
	S35860.05.12-1-R1	ASTM D6163	06/07/12	
	S35860.05.12-2-R1	ASTM D6164	06/07/12	
	S35860.05.12-3	ASTM D6164	05/08/12	
	S2000.02.13	TAS 114	02/01/13	
	Factory Mutual Research Corporation	1Z3A6.AM	FM 4470	04/27/95
		1W8A1.AM	FM 4470	07/15/93
3029098		FM 4470	10/25/07	
3024311		FM 4470	11/01/06	
3036182		FM 4470	07/31/09	
3014751		FM 4470	08/27/03	
3X3A7.AM		FM 4470	09/08/94	
3045101		FM 4470	11/05/12	
Underwriters Laboratories	R11436	UL 790	06/18/13	
IRT of S. Florida	990028	TAS 114	9/30/99	
ITS / Warnock Hersey		ASTM D 5147	05/27/93	
PRI Construction Materials Technologies, LLC	SOP-049-02-01	ASTM D1644	05/31/12	
		ASTM D2196		
	SOP-043-02-01	ASTM D4601	02/27/12	
	SOP-042-02-01	ASTM D4601	02/27/12	
	SOP-041-02-01	ASTM D2178	02/27/12	
	SOP-040-02-01	ASTM D2178	02/27/12	
	SOP-010-02-01.03	TAS-138	07/26/11	
SOP-050-02-01	ASTM D3019	07/12/12		



APPROVED ASSEMBLIES:

- Membrane Type:** SBS
- Deck TypeII:** Wood, Insulated
- Deck Description:** 19/32” or greater plywood or wood plank
- System Type A(1):** Anchor sheet mechanically fastened, all layers of insulation adhered with approved asphalt or adhesive.

All General and System Limitations apply.

- Slip Sheet:** One or more plies of approved ASTM D4601 applied loose laid to deck prior to the attachment of vapor retarder.
- (Optional)**
- Anchor Sheet:** One layer Sopra G, Soprabase, Soprabase S, Elastophene 180 Sanded, Sopralene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 250 Sanded, Sopralene 250 SP, mechanically attached with FBC HVHZ nails and tin-caps spaced 6” o.c. in a 4” wide side lab and 6” o.c. in three evenly spaced rows in the field of the sheet.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, Multi-Max FA-3 or H-Shield, M-Shield, Sopra-ISO r		
Minimum 1.5” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, SECUROCK Gypsum-Fiber Roof Board		
Minimum 1/4” thick	N/A	N/A
Sopraboard		
Minimum 1/8” thick	N/A	N/A

Note: All insulation shall be adhered to the vapor barrier in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² or Soprema High Velocity[®] Insulation Adhesive II (HVIA-II), High Velocity[®] Insulation Adhesive III (HVIA-III), High Velocity[®] Insulation Adhesive III –Green or High Velocity[®] Insulation Adhesive PG in 3/4” wide ribbons, Insta-Stik adhesive in 1” wide ribbons, TITASET Roofing Adhesive, 3M Polyurethane Foam Insulation Adhesive CR-20 or FasTac in 3” wide ribbons, spaced 6” o.c. (Adhesive is applied atop fastener rows). Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as a final membrane substrate.2

- Primer:** Elastocol 500, Elastocol Stick or AquaTac at a rate of 1 gal./sq. for Colvent TG
- (Optional)** or Colvent 180 TG application.
- Base Sheet:** One layer Colvent TG or Colvent 180 TG, heat welded.



**Ply Sheet:
(Optional)** One or more layers of Elastophene Flam*, Elastophene Flam 2.2*, Elastophene Flam HS*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250*, Sopralene 250 SP, heat welded.

Or

Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.

*Requires heat welded cap membrane.

Membrane: Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, SopraStar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

Maximum Design Pressure: -60 psf. (See General Limitation #7.)

Membrane Type: SBS
Deck TypeII: Wood, Insulated
Deck Description: 19/32” or greater plywood or wood plank
System Type A(2): Anchor sheet mechanically fastened, all layers of insulation adhered with approved asphalt or adhesive.

All General and System Limitations apply.

Slip Sheet: (Optional) One or more plies of approved ASTM D4601 applied loose laid to deck prior to the attachment of vapor retarder.
Anchor Sheet: One layer Sopra G, Soprabase, Soprabase S, Elastophene 180 Sanded, Sopralene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 250 Sanded, Sopralene 250 SP, mechanically attached with FBC HVHZ nails and tin-caps spaced 6” o.c. in a 4” wide side lab and 6” o.c. in three evenly spaced rows in the field of the sheet.
Primer: Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to top surface of any insulation, base or ply sheet prior to application of next layer.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, Multi-Max FA-3, Sopra-ISO r, M-Shield, H-Shield Minimum 1.5” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4” thick	N/A	N/A
Sopraboard Minimum 1/8” thick	N/A	N/A

Note: All insulation shall be adhered to the vapor barrier in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² or in Soprema High Velocity® Insulation Adhesive II (HVIA-II), High Velocity® Insulation Adhesive III (HVIA-III), High Velocity® Insulation Adhesive III –Green or High Velocity® Insulation Adhesive PG in 3/4” wide ribbons, Insta-Stik adhesive in 1” wide ribbons, TITASET Roofing Adhesive, 3M Polyurethane Foam Insulation Adhesive CR-20 or FasTac in 3” wide ribbons, spaced 6” o.c. (Adhesive is applied atop fastener rows). Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as a final membrane substrate.



Base Sheet: One layer of Elastophene Flam*, Elastophene Flam 2.2*, Elastophene Flam HS*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250*, Sopralene 250 SP, Colvent TG or Colvent 180 TG, heat welded.

Or

One layer of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq., FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive.

*Requires heat welded ply or cap membrane.

Primer: Elastocol 500, Elastocol Stick or AquaTac at a rate of 1 gal./sq. for Colvent TG
(Optional) or Colvent 180 TG.

Ply Sheet: Elastophene Flam*, Elastophene Flam 2.2*, Elastophene Flam HS*,
(Optional) Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250*, Sopralene 250 SP, heat welded.

Or

Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq., FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive to sand surface base membrane.

*Requires heat welded cap membrane.

Membrane: Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq., FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive to sand surfaced base or ply membrane.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

Maximum Design Pressure: -60 psf. (See General Limitation #7.)



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Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: 19/32" or greater plywood or wood plank
System Type C(1): All layers of insulation simultaneously attached.

All General and System Limitations apply.

Slip Sheet: One or more plies of approved ASTM D4601 applied loose laid to deck.
(Optional)

One or more layers of the following.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Approved EPS or XPS, or any approved polyisocyanurate insulation listed in Table 2 (flat or tapered)		
Minimum 1" thick	N/A	N/A
Approved EPS		
Minimum 1" thick	N/A	N/A

Note: All layers of insulation shall be simultaneously fastened; see layer below for fasteners and density.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	1, 2, 8, 12, 24 (#14)	1:1.6 ft ²
Sopraboard		
Minimum 1/8" thick	1, 2, 8, 12, 24 (#14)	1:1.6 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners shall be increased maintaining the same fastener density. (See Roofing Application Standard RAS 117 for fastening details.)

Primer: Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to top surface of any insulation, base or ply sheet prior to application of next layer.
(Optional)

Base Sheet: One layer Colvent TG or Colvent 180 TG, heat welded.

Ply Sheet: One or more layers of Elastophene Flam*, Elastophene Flam 2.2*, Elastophene Flam HS*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250*, Sopralene 250 SP, heat welded.
(Optional)

Or
Ply Sheet: Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.
(Cont.)

*Requires heat welded cap membrane.



Membrane: Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7.)



Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: 19/32" or greater plywood or wood plank
System Type C(2): All layers of insulation simultaneously attached.

All General and System Limitations apply.

Slip Sheet: One or more plies of approved ASTM D4601 applied loose laid to deck.
(Optional)

One or more layers of the following.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Approved EPS or XPS or any approved polyisocyanurate insulation listed in Table 2(flat or tapered)		
Minimum 1" thick	N/A	N/A
Approved EPS		
Minimum 1" thick	N/A	N/A

Note: All layers of insulation shall be simultaneously fastened; see layer below for fasteners and density.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	1, 2, 8, 12, 24 (#14)	1:1.6 ft ²
Sopraboard		
Minimum 1/8" thick	1, 2, 8, 12, 24 (#14)	1:1.6 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners shall be increased maintaining the same fastener density. (See Roofing Application Standard RAS 117 for fastening details.)

Primer: Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to top surface of any insulation, base or ply sheet prior to application of next layer.
(Optional)

Base Sheet: One layer of Elastophene Flam*, Elastophene Flam 2.2*, Elastophene Flam HS*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250*, Sopralene 250 SP, Colvent TG or Colvent 180 TG, heat welded.

Or

One layer of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq., FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive.

*Requires heat welded ply or cap membrane.



**Ply Sheet:
(Optional)** Elastophene Flam*, Elastophene Flam 2.2*, Elastophene Flam HS*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250*, Sopralene 250 SP, heat welded.

Or

Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS*, Sopralene 180 PS 2.2, Sopralene 180 Sanded, Sopralene 180 PS*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq., FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or SopraStar Adhesive to sand surfaced base membrane.

Membrane: Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, SopraStar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq., FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or SopraStar Adhesive to sand surfaced base or ply membrane.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

Maximum

Design Pressure: -52.5 psf. (See General Limitation #7.)



Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: 1 9/32" or greater plywood or wood plank
System Type D(1): All layers of insulation and base sheet simultaneously attached.

All General and System Limitations apply.

Slip Sheet: One or more plies of approved ASTM D4601 applied loose laid to deck.
(Optional)

One or more layers of the following:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, ACFoam III, Sopra-ISO s, Sopra-ISO+ s, H-Shield, M-Shield, Sopra-ISO r (flat or tapered)		
Minimum 1.5" thick	N/A	N/A
ENRGY3 (flat or tapered)		
Minimum 1.4" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Approved High Density Wood Fiberboard, Structodek High Density Fiberboard Roof Insulation		
Minimum 0.5" thick	N/A	N/A
Fesco Board		
Minimum 0.75" thick	N/A	N/A
DensDeck, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A
Sopraboard		
Minimum 1/8" thick	N/A	N/A
DensDeck DuraGuard Fireguard Type X Gypsum Board		
Minimum 5/8" thick	N/A	N/A

Note: Top insulation layer shall have preliminary attachment at a density of two Approved insulation fasteners per board for insulation boards having any one dimension no greater than 4 ft. and a minimum of four Approved insulation fasteners per board for insulation boards having any one dimension greater than 4 ft. Composite insulation panels shall be placed with the polyisocyanurate side down.

Base Sheet: One ply of Sopra G, Modified Sopra G, Soprabase, Soprabase S or Soprabase TG fastened to the deck as described. Attach base sheet using SFS Dekfast #14 Fastener with Dekfast Galvalume Steel Hex Plate spaced 9" o.c. in a 4" lap and 12" o.c. in two staggered rows in the center of the sheet.



- Ply Sheet:
(Optional)** One ply of Elastophene Flam*, Elastophene Flam 2.2*, Sopralene Flam 180*, Sopralene Flam 250*, Sopralene 180 SP, Sopralene 250 SP, heat welded
Or
One ply of Elastophene Sanded, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 PS*, Sopralene 180 Sanded, Sopralene 250 Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.
*Requires heat welded cap membrane.
- Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, SopraStar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 250 FR GR, Sopralast 50 TV Alu, heat welded
Or
Elastophene FR GR, Elastophene LS FR GR, Elastophene GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base or ply membrane.
- Surfacing:** Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.
- Maximum Design Pressure:** -45 psf. (See General Limitation #9.)

Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: Min. 19/32" plywood or wood plank
System Type D(2): All layers of insulation and base sheet simultaneously attached.
Deck: Decking is attached to spans spaced maximum 24" o.c. with #10 wood screws spaced maximum 6" o.c.

All General and System Limitations apply.

Slip Sheet: One or more plies of approved ASTM D4601 applied loose laid to deck.
(Optional)

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Any approved polyisocyanurate listed in Table 2(flat or tapered) Minimum 1" thick	N/A	N/A
Approved EPS or XPS Minimum 1" thick	N/A	N/A
Approved High Density Wood Fiberboard Minimum 0.5" thick	N/A	N/A
Approved Perlite Minimum 0.75" thick	N/A	N/A
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 0.5" thick	N/A	N/A
Sopraboard Minimum 1/8" thick	N/A	N/A

Note: Insulation layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Primer: Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to top surface of any base or ply sheet prior to application of next layer

Base Sheet: One ply of Soprafix, Soprafix Base 622, Soprafix [X]*, Soprafix Base 614*, Soprafix-e or Soprafix Base 641, fastened to the deck as described below:

*Requires heat welded ply or cap membrane.

Fastening: Attach base sheet using Soprafix MBB-R with Soprema #15 fasteners spaced 6" o.c. in the minimum 5" wide lap.

Ply Sheet: Sopralene Flam 180*, Sopralene 180 SP 3.5, Sopralene Flam 250*, Sopralene 250 SP, heat welded.

(Optional)

*Requires heat welded cap membrane.



Membrane: SopraStar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, heat welded.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

Maximum Design Pressure: -90 psf. (See General Limitation #7)



Membrane Type: SBS
Deck Type 1: Wood, Non-insulated
Deck Description: 1 9/32" or greater plywood or wood plank decks
System Type E(1): Base sheet mechanically fastened.

All General and System Limitations apply.

Slip Sheet: One or more plies of approved ASTM D4601 applied loose laid to deck.
(Optional)

Base Sheet: One or two plies of Sopra G, Modified Sopra G, Soprabase, Soprabase S or Soprabase TG fastened to the deck using approved roofing nails and tin caps spaced 9" o.c. in a 4" lap and 12" o.c. in two staggered rows in the center of the sheet.

Ply Sheet: One ply of Elastophene Flam*, Elastophene Flam 2.2*, Sopralene Flam 180*, Sopralene Flam 250*, Sopralene 180 SP, Sopralene 250 SP, heat welded

Or

One ply of Elastophene Sanded, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene PS*, Elastophene PS 3.0*, Elastophene 180 PS, Sopralene 180 PS 2.2*, Sopralene 180 PS*, Sopralene 180 Sanded, Sopralene 250 Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

*Requires heat welded cap membrane.

Membrane: Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Soprastar Flam Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 250 FR GR, Sopralast 50 TV Alu, heat welded

Or

Elastophene FR GR, Elastophene LS FR GR, Elastophene GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base or ply membrane.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

Maximum Design Pressure: -45 psf. (See General Limitation #9.)



Membrane Type: SBS
Deck Type 1: Wood, Non-insulated
Deck Description: 1 9/32" or greater plywood or wood plank decks
System Type E(2): Base sheet mechanically fastened.

All General and System Limitations apply.

Slip Sheet: One or more plies of approved ASTM D4601 applied loose laid to deck.
(Optional)

Base Sheet: One ply of Soprafix, Soprafix Base 622 or Sopralene Flam 180* or Sopralene Flam 250* fastened to the deck as described below:

*Requires heat welded ply or cap membrane.

Fastening #1: Attach base sheet using SFS Dekfast or Soprema fasteners with Soprafix 2" SB Stress Plates spaced 18" o.c. in a 4" wide heat welded or bituminous taped seam.

Fastening #2: Attach base sheet using SFS Dekfast fasteners and SFS Dekfast Galvalume Steel 3 in. Round Plate spaced 24" o.c. in the center of the sheet. Laps are heat fused. Fastener rows are stripped in with a 7" wide section of torch applied base sheet membrane.

Ply Sheet: One ply of Elastophene Flam*, Elastophene Flam 2.2*, Sopralene Flam 180*, Sopralene Flam 250*, Sopralene 180 SP, Sopralene 250 SP, heat welded
(Optional)

*Requires heat welded cap membrane.

Membrane: Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, SopraStar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 250 FR GR, Sopralast 50 TV Alu, heat welded

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

Maximum Design Pressure: -45 psf. (See General Limitation #9.)



Membrane Type: SBS
Deck Type II: Wood, Non-Insulated
Deck Description: Min. 19/32" plywood or wood plank
System Type E(3): Base sheet mechanically fastened.
Deck: Decking is attached to spans spaced maximum 24" o.c. with #10 wood screws spaced maximum 6" o.c.

All General and System Limitations apply.

**Slip Sheet:
(Optional)** One or more plies of approved ASTM D4601 applied loose laid to deck.
Primer: Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to top surface of any base or ply sheet prior to application of next layer
Base Sheet: One ply of Soprafix, Soprafix Base 622, Soprafix [X]*, Soprafix Base 614*, Soprafix-e or Soprafix Base 641, fastened to the deck as described below:
*Requires heat welded ply or cap membrane.
Fastening #1: Attach base sheet using Soprafix MBB-R with Soprema #15 fasteners spaced 6" o.c. in the minimum 5" wide lap.
**Ply Sheet:
(Optional)** Sopralene Flam 180*, Sopralene 180 SP 3.5, Sopralene Flam 250*, Sopralene 250 SP, heat welded.
*Requires heat welded cap membrane.
Membrane: Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, heat welded.
Surfacing: Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.
Maximum Design Pressure: -90 psf. (See General Limitation #7)



WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 11-0119.07
Expiration Date: 12/31/14
Approval Date: 06/27/13
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